

DRAFT Environmental Assessment

Marshall Creek Wildlife Management Area Acquisition

Montana Fish, Wildlife and Parks
Region 2 – Missoula
3201 Spurgin Rd., Missoula, MT 59804



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***Montana Fish,
Wildlife & Parks***

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1.0 PURPOSE OF AND NEED FOR ACTION

1.1 Proposed Action and Need

Montana Fish, Wildlife & Parks (FWP) proposes to purchase 24,170 acres of critical fisheries and wildlife habitat in the upper Clearwater River drainage, northwest of the community of Seeley Lake in Missoula County, and manage it as the Marshall Creek Wildlife Management Area (WMA). The property includes most of the West Fork Clearwater River, Marshall Creek, Deer Creek, and North Fork of Placid Creek drainages, as well as Lake Marshall and a small portion of Uhler Creek.

The land is currently owned by Plum Creek Timber Company (PCTC), but is under contract to be sold to The Nature Conservancy (TNC) and The Trust for Public Land (TPL) as part of the Montana Legacy Project. This Project is the largest private conservation initiative in US history and would ultimately convey 310,000 acres of corporate timberland to conservation buyers, primarily State and federal agencies. FWP identified the property as one of its highest statewide native fisheries and wildlife conservation priorities in the Montana Comprehensive Fish and Wildlife Conservation Strategy (MFWP 2005) and began applying in 2008 for federal grants to aid in its purchase. FWP has since been granted the majority of the funds from the US Fish and Wildlife Service and US Department of Agriculture necessary to purchase the property; these funds, when matched with FWP Habitat Montana Program, FWP Hunting Access Enhancement Funds, and private fundraising, would allow FWP to purchase the property from TNC/TPL after they purchase the property from Plum Creek in fall of 2010.

The proposed Marshall Creek WMA includes approximately 25 miles of native fish-bearing perennial streams in four major tributary drainages (West Fork Clearwater River, Marshall Creek, Deer Creek, and the North Fork of Placid Creek) within the upper Clearwater lakes and river system. The system lies within the 2,290-square-mile Blackfoot Watershed in western Montana, located at the southern terminus of the Northern Continental Divide Ecosystem. The West Fork Clearwater River and Marshall Creek provide key adfluvial bull trout spawning and rearing habitat that is the primary source of bull trout and westslope cutthroat trout recruitment for the upper half of the Clearwater River system. The West Fork is one of the most important adfluvial bull trout spawning streams in FWP's Region 2. Deer Creek contains a smaller, but important resident and spawning bull trout population. This population contributes to genetic diversity as well as geographic distribution, attributes that are important to persistence and recovery of bull trout. These streams also support numerous stream-resident and migratory westslope cutthroat trout populations with high genetic integrity. Mountain whitefish and many other native fish species occur in lower portions of these tributaries and in the main stem Clearwater River and lake system.

The Marshall Creek WMA property provides habitat for over 160 native species including over 37 identified Montana Species of Concern and is critical habitat for three federally listed Threatened species (bull trout, Canada lynx, and grizzly bears). Additionally, the property includes the most important unprotected Canada lynx habitat in the western US. The lands also provide high quality habitat for game species including elk, mule deer, white-tailed deer, moose, black bear, mountain lion, mountain grouse, and gray wolf. The property has been identified as a

high priority linkage corridor (FWP, American Wildlands 2009) between the Mission Mountains and Bob Marshall/Scapegoat wildland complexes.

The property also provides thousands of hunter-days annually. The proposed WMA is a key component of one of the most heavily used snowmobile trail systems in the country (SnoWest Magazine 2000) and is used throughout the year for hiking, camping, horseback riding, and other outdoor public recreation.

Human population is growing rapidly throughout western Montana. Development pressure is especially acute in the upper Clearwater valley. The resort community of Seeley Lake is growing faster than any other area in the Blackfoot Watershed as high amenity values drive strong demand for second homes and commercial development. Private sale and development of the property would degrade critical fisheries and wildlife habitats, could restrict recreational access to and use of the land, and could inhibit public access to large tracts of State and federal lands.

This project compliments a 40-year history of land conservation in the Blackfoot watershed. Since 1973, more than 300,000 acres have been permanently protected in the Blackfoot, including the voluntary sale of private conservation easements and transfer of corporate timberland to state and federal agencies.

1.2 Objectives of the Proposed Action

- To protect and enhance cold, clean, complex, and connected native salmonid habitat critical to bull trout, westslope cutthroat trout, mountain whitefish, and other aquatic species in the Clearwater River system and greater Blackfoot Watershed;
- To protect and enhance critical habitat for sensitive wildlife species;
- To protect and enhance habitat for a wide variety of game species;
- To preserve terrestrial wildlife habitat and movement corridors between the Mission Mountains and Bob Marshall/Scapegoat wildland complexes for the benefit of game and nongame species; and
- To provide managed public access to the property and adjacent State and federal lands for hunting, angling, hiking, camping, snowmobiling and other recreational activities.
- To protect important forest areas that are threatened by conversion to non-forest uses and therefore also protect scenic, cultural, fish, wildlife, area recreation resources and riparian areas.

1.3 Location

The Marshall Creek WMA property lies about eight miles northwest of the town of Seeley Lake, in Missoula County, Montana (Figure 1).

Legal Description (general terms):

Missoula County: T17N, R16W Sections 1-4, 8-21, 30, and 31
T17N, R17W Section 13
T18N, R16W Sections 14-17, 20-23, 25-29, and 31-36

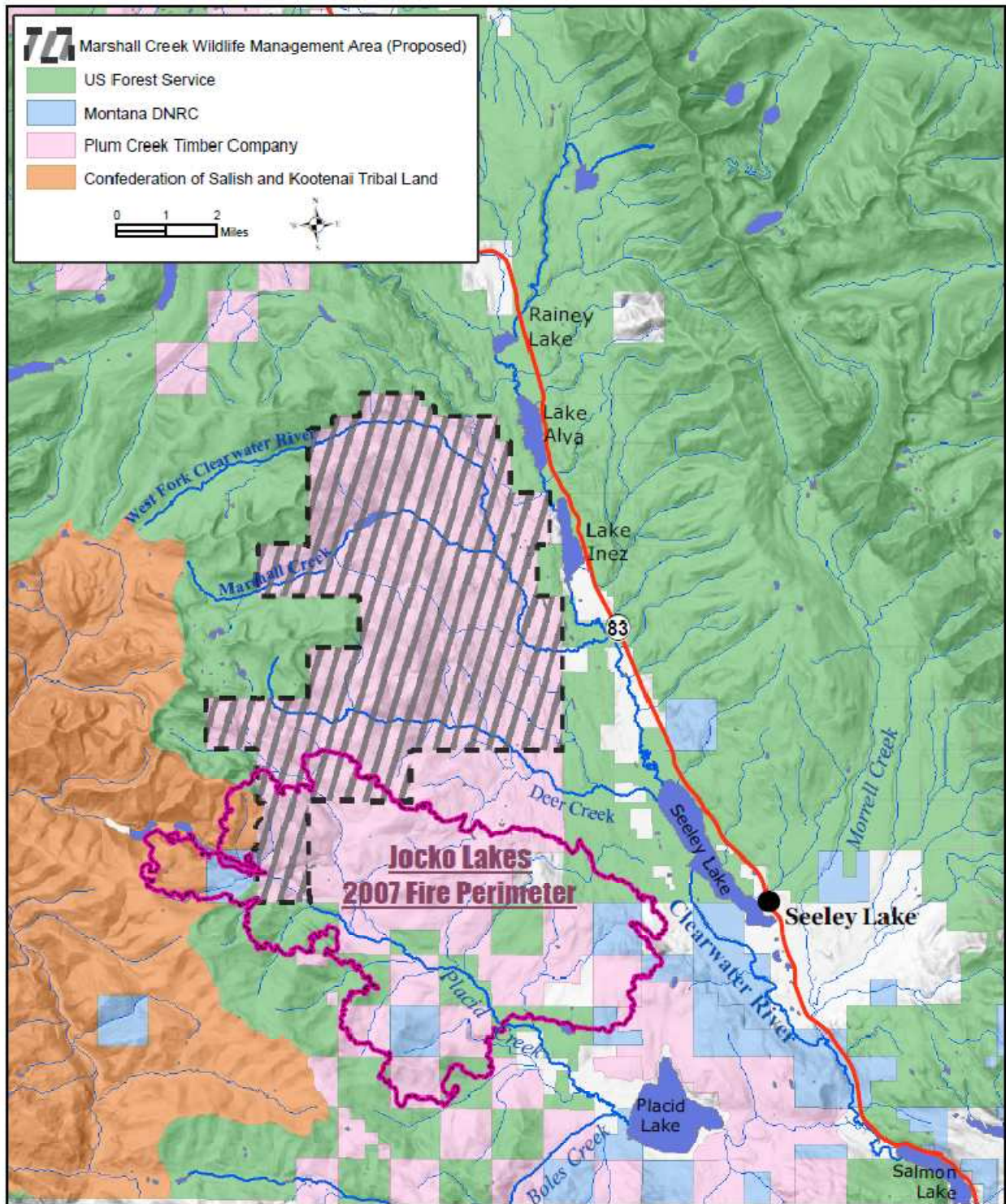


Figure 1. Map of proposed Marshall Creek WMA

1.4 Application to FWP Comprehensive Fish and Wildlife Conservation Strategy

The proposed Marshall Creek WMA property lies within one of the aquatic conservation focus areas in greatest need of protection as identified in FWP's Comprehensive Fish & Wildlife Conservation Strategy (MFWP 2005). The *Blackfoot River Focus Area* begins at the junction of Beartrap and Anaconda creeks near the Continental Divide and flows 132 miles west to its mouth at Bonner, Montana. In 2008, the removal of the Milltown Dam restored the river to flow unimpeded into the Clark Fork River for the first time since 1907. There are a total of 23 aquatic species found within this focus area including the federally listed bull trout and Montana Species of Concern westslope cutthroat trout (Tier 1) and western pearlshell mussel (Tier 2).

The project area is also within the *Tier 1 Mission/Swan Valley & Mountains Terrestrial Focus Area*, part of the *Montane Forest Ecotype* as described in FWP's CFWCS. Tier 1 terrestrial species use *Wetlands and Riparian Community Types* as major corridors. Wetlands comprise more than 15% of this focus area which consist of fens, peatlands, marshes, vernal pools, and lakes. Most of these wetlands lie within riparian corridors. Many of the Species of Greatest Conservation Need (SGCN) native to the project lands require large intact landscapes which are both primary habitat and which ensure genetic metapopulation connectivity. The CFWCS specifically identified this Focus Area as deserving Tier 1 status because it "*serves as a major corridor for SGCN.*"

Riparian and wetland communities support the highest concentration of plants and animals in Montana, including the highest density and diversity of breeding birds in Montana. This property contains approximately 19 miles (75 acres) of high quality riparian habitat along Deer and Marshall Creeks and the West Fork Clearwater River bordered by dogwood, alder, and willows. Conifers, with a streamside understory of broadleaf shrubs, and scattered cottonwood and aspen, dominate most of the riparian habitat in the project area. These conifer riparian habitats may be narrow compared to the broad riparian habitats along the Blackfoot River, but they are critical to maintaining species diversity in the project area, as well as overall water quality in the Blackfoot watershed.

The unique diversity of these cover types provides habitats potentially supporting 160 wildlife species within the proposed WMA. Table 1 lists the CFWCS Tier1 species and Species of Concern that are predicted to occur on or in the vicinity of the property. Evaluation of current habitat conditions within the Marshall Creek WMA property and the probability of occurrence of sensitive species are noted under comments.

Table 1. CFWCS Tier 1 Species and Montana Species of Concern (SOC)

Common Name <i>Scientific name</i>	Habitat	SOC	CFWCS Tier	Comments
<i>Amphibian (1)</i>				
Western Toad <i>Bufo boreas</i>	Wetlands, lakes, floodplain pools	SOC	1	Suitable aquatic and upland habitats for this species.
<i>Birds (21)</i>				
American Bittern <i>Botaurus lentiginosus</i>	Wetlands	SOC	2	Found in wetlands along the Clearwater River.
Bald Eagle <i>Haliaeetus leucocephalus</i>	Riparian forests	SOC	1	Nests at Lake Alva. Uses the Clearwater River and other lakes for foraging. Potential winter roosting sites in conifer forest stands.
Black Swift <i>Cypseloides niger</i>	Cliffs, waterfalls, forages over wetland and riparian habitats	SOC	2	Possible foraging habitat in area.
Black-backed Woodpecker <i>Picoides articus</i>	Conifer forest burns	SOC	1	Found in burned forest nearby, will use the project area after fire.
Boreal Chickadee <i>Poecile gambeli</i>	Spruce fir forest	SOC	2	Found in low numbers in the Seeley- Swan valley.
Cassin's Finch <i>Carpodacus cassinii</i>	Conifer Forest	SOC	2	Verified near area during bird point counts.
Clark's Nutcracker <i>Nucifraga columbiana</i>	Conifer forests	SOC	3	Uses conifer forests in the area, newly- added to the Montana SOC list.
Common Loon <i>Gavia immer</i>	Mountain lakes with emergent vegetation	SOC	1	Lake Marshall used for foraging, Lakes Alva and Inez used for nesting.
Flammulated Owl <i>Otus flammeolus</i>	Conifer forests	SOC	1	Uses conifer forests in the area for nesting and foraging.
Golden Eagle <i>Aquila chrysaetos</i>	Cliffs, open forests, grasslands, subalpine	SOC	2	Suitable nesting and foraging habitat, not verified in area.
Great Blue Heron <i>Ardea herodias</i>	Wetlands, riparian	SOC	3	Nesting rookery at Lake Inez, foraging habitat in area
Great Gray Owl <i>Strix nebulosa</i>	Conifer forests	SOC	1	Species documented on the project area, nearest documented nest is 13 miles NE.
Hooded Merganser <i>Lophodytes cucullatus</i>	Riparian forests	PSOC	2	Found along Clearwater River
Northern Goshawk <i>Accipiter gentiles</i>	Mixed conifer forest	SOC	2	Uses conifer forests in the area for nesting and foraging.
Olive-sided Flycatcher <i>Contopus cooperi</i>	Early seral forest/shrub patches, burned forest		1	Documented in suitable habitat throughout the area.
Peregrine Falcon <i>Falco peregrinus</i>	Cliffs (nesting), riparian forests & wetlands (foraging)	SOC	2	Riparian and wetland habitats potentially used for foraging by migrating birds.
Pileated Woodpecker <i>Dryocopus pileatus</i>	Conifer forests with large trees	SOC	2	Verified on the area, suitable habitat.
Trumpeter Swan <i>Cygnus buccinator</i>	Shallow lakes with submerged and emergent vegetation and low disturbance levels.	SOC	1	Reintroduction programs in nearby Mission and Blackfoot Valleys, habitats for this species found primarily along the Clearwater River.
Veery <i>Catharus fuscescens</i>	Riparian	SOC	2	Found along the Clearwater River.

Common Name <i>Scientific name</i>	Habitat	SOC	CFWCS Tier	Comments
Western Screech-Owl <i>Megascops kennicottii</i>	Riparian forests	PSOC	3	Potential habitat, not verified.
White-tailed Ptarmigan <i>Lagopus leucura</i>	Alpine	SOC	2	Present in Swan Mountains and probably present in Mission mountains.
<i>Fish (2)</i>				
Bull Trout <i>Salvelinus confluentus</i>	Mountain streams, rivers, lakes	SOC	1	Project area is the key spawning and rearing area for adfluvial population in Clearwater drainage.
Westslope Cutthroat Trout <i>Oncorhynchus clarkii lewisi</i>	Mountain streams, rivers, lakes	SOC	1	Abundant populations in project area with both stream-resident and migratory components, and high genetic purity.
<i>Mammals (12)</i>				
Canada Lynx <i>Lynx Canadensis</i>	Subalpine conifer forests	SOC	1	The Clearwater Lands Project, and the project parcel in particular, contains some of the highest quality, currently unprotected, Canada lynx habitat in the western US
Fisher <i>Martes pennanti</i>	Mixed conifer forests	SOC	2	Fisher are resident within the proposed WMA.
Fringed Myotis <i>Myotis thysanodes</i>	Riparian and dry mixed conifer forests	SOC	2	Potential habitat, but insufficient surveys to determine presence or absence in project area.
Gray Wolf <i>Canis lupus</i>	Generalist	SOC	1	Commonly observed within the proposed WMA.
Grizzly Bear <i>Ursus arctos horribilis</i>	Generalist	SOC	1	The subject parcel provides important post-emergence foraging habitat, contains federally designated Recovery Area, is adjacent to modeled denning habitat, and serves as a critical movement corridor.
Hoary Bat <i>Lasiurus cinereus</i>	Riparian and conifer forests	SOC	2	Uses mature trees (conifer or broadleaf) for roosting. Forages over forest canopy, wetlands, and water.
Hoary Marmot <i>Marmota caligata</i>	Alpine	PSOC	1	Found in Mission Mountains, not yet verified on the property.
Northern Bog Lemming <i>Synaptomys borealis</i>	Wetlands (peatlands)	SOC	1	Potential habitat present, wetlands in area have not yet been surveyed for the species.
Silver-haired Bat <i>Lasionycteris noctivagans</i>	Conifer and riparian forests	PSOC	2	Suitable habitat, presence not yet verified.
Townsend's Big-eared Bat <i>Corynorhinus townsendii</i>	Caves and mines (roosting), riparian, wetlands, forests (foraging)	SOC	1	Project area has foraging habitat, but no known roosting habitat.

Common Name <i>Scientific name</i>	Habitat	SOC	CFWCS Tier	Comments
Wolverine <i>Gulo gulo</i>	Conifer forests	SOC	2	Species routinely detected on the property and the project area falls within a critical habitat linkage zone between the Mission Mountains and Bob Marshall Wilderness Complex.
Yuma Myotis <i>Myotis yumaensis</i>	Riparian and mixed forests near water	PSOC	2	Potential habitat, not verified (difficult to identify).
<i>Mollusk (1)</i>				
Western Pearlshell <i>Margaritifera falcata</i>	Mountain streams/rivers	SOC	1	Recent surveys indicate that Marshall Creek and the Clearwater River provide some of the highest quality western pearlshell habitat in Montana.

1.5 Authority and Responsibility

FWP has the authority to purchase lands that are suitable for game, bird, fish or fur-bearing animal restoration, propagation or protection; for public hunting, fishing, or trapping areas; and for state parks and outdoor recreation, per Montana statute Section 87-1-209, Montana Code Annotated (MCA).

Funding for the proposed acquisition would come from three federal sources: the US Fish and Wildlife Service's Habitat Conservation Plan Land Acquisition Program, the USFWS's State Wildlife Grant Program, and the USDA Forest Service's Forest Legacy Program. FWP has the authority to use each program's funds through the following guidance:

- USFWS Habitat Conservation Plan and State Wildlife Grant Programs: Per 87-1-709, MCA, FWP has the power to acquire lands with federal funds for the one or more of the following purposes: a) protecting or maintaining habitat conditions for fish or wildlife species by placing land under public control or ownership, b) developing or improving habitat conditions to enhance carrying capacity, and/or c) providing public access for the use of fish and wildlife resources.
- US Forest Service Forest Legacy Program: The Forest Legacy Program (FLP) is a Federal program in partnership with States that supports State efforts to protect environmentally sensitive forest lands for wildlife habitat, water quality, wetland protection, and recreation. FLP directly supports property acquisition.

To enable application of these federal grant funds, the State of Montana or private entities must provide incremental matching funds. FWP's Habitat Montana Program, the FWP Hunting Access Enhancement Fund, and the Blackfoot Challenge have committed the funds necessary to match the above-described federal grants.

Per state law 87-1-201(9), MCA, FWP is required to implement programs that address fire mitigation, pine beetle infestation, and wildlife habitat enhancement, giving priority to forested lands in excess of 50 contiguous acres in any state park, fishing access site, or wildlife management area under the department's jurisdiction. FWP would develop and implement forest management plans for this property to meet the intent of this statute.

FWP is also required to establish a maintenance account for property acquisitions (87-1-209 and 23-1-127 (2), MCA). Such an account would be used for weed maintenance, fence installation or repair of existing fences, garbage removal, the implementation of safety and health measures required by law to protect public, erosion control, streambank stabilization, erection of barriers to preserve riparian vegetation and habitat, and planting of native trees, grasses, and shrubs for habitat stabilization. Such maintenance activities should be consistent with the Good Neighbor policy.

2.0 ALTERNATIVES

2.1 Alternative A--Proposed Action: FWP would purchase 24,170 acres via fee title from The Nature Conservancy and The Trust for Public Land for the Marshall Creek WMA

FWP proposes to acquire approximately 24,170 acres in two phases for the protection of habitat for native fish, species of statewide concern, game and non-game species, and the provision of recreational access to and through the Marshall Creek WMA property. The first phase (Phase 1) would include between 13,934 and 20,349 acres within the West Fork Clearwater River and Marshall Creek drainages and their tributaries. The second phase would conclude with the acquisition of between 3,821 and 10,236 acres including the headwaters of Placid Creek and most of Deer Creek.

At the time of the publication of this EA, the property is owned by Plum Creek Timber Company, but is under contract for sale to TNC/TPL in November of 2010. FWP proposes to immediately purchase Phase 1 from TNC/TPL upon closing with PCTC. Phase 2 would be purchased from TNC/TPL in spring 2011 when Forest Legacy Program funds become available.

FWP has drafted an interim management plan for the property that is attached as Attachment A. The interim management plan would direct FWP management of the WMA until habitat assessments, infrastructure inventories, and public scoping are completed. A comprehensive management plan would be drafted when these more complete data are available.

Funding for the purchase of the proposed Marshall Creek WMA would come from USFWS Native Fish Habitat Conservation Plan grants, a USFWS Wildlife Grant, a US Department of Agriculture Forest Legacy Program grant, the FWP Habitat Montana Program, the FWP Hunting Access Enhancement Fund, and private funds donated by the Blackfoot Challenge. The total purchase price for the 24,170 acres is expected to be \$18.4 million. The preliminary maintenance budget for the property is expected to be \$53,970 annually. Property taxes are expected to be \$18,720 annually (see Section IX, Maintenance Budget in Attachment A, Draft Management Plan for details).

2.2 Alternative B--No Action: FWP would not purchase the Marshall Creek WMA Property

Under the No Action Alternative, FWP would not acquire the 24,170-acre property from TNC/TPL. TNC/TPL would then pursue other sale options, likely to a private entity.

2.3 Alternative Considered but Eliminated from Further Analysis: FWP purchasing a Conservation Easement

This alternative was originally considered a viable option when FWP submitted applications to the US Fish and Wildlife Service for Native Fish Habitat Conservation Plan and State Wildlife Grant funding. Since then, appraised property values have declined in Montana and other potential purchasers of underlying fee title have withdrawn interest. Because awarded federal grant funds are now sufficient to allow FWP to purchase fee-title to the property, potential purchasers of the underlying fee title have not been identified; because FWP fee-ownership of the property would best protect its conservation values, FWP no longer considers a conservation easement purchase over the property a reasonable option.

3.0 AFFECTED ENVIRONMENT AND PREDICTED CONSEQUENCES

3.1 LAND USE

In the late 1800s a “checkerboard” (every other section) of federal land within the proposed Marshall Creek WMA boundary was granted to the railroad companies. Those federal in-holdings were then exchanged with the Anaconda Company in the 1950s to consolidate Forest Service ownership within what was later to become the Bob Marshall Wilderness Complex. Since then, the contiguous private lands have been managed by a series of corporations for timber production, including the property’s current owner, Plum Creek Timber Company.

Under corporate timber company ownership, most timbered stands on the property have been actively managed for timber production over the past 50 years and are in some stage of regeneration. There are approximately 290 miles of roads (in various conditions) on the property, which were originally established for timber harvesting, including 37 miles of road currently open to public wheeled motorized use. Most of the open road system has been managed under cost-share agreements between the current landowner and the US Forest Service.

Public recreation has been allowed on the property by PCTC for many years. The predominant recreational activities include snowmobiling, hunting, fishing, trapping, hiking, and water-based activities on Lake Marshall. See section 3.6 for additional information and discussion of the recreational activities.

The only commercial development on the property is a single microwave tower on West Fork Point and an access easement to the tower would transfer with the deed.

Proposed Action: The Marshall Creek WMA would be managed in a manner consistent with that of other WMAs owned and managed by FWP (e.g., Blackfoot-Clearwater, Lost Creek, Garrity Mountain, Fleecer Mountain, and Sun River). Upon acquisition, FWP would conduct a detailed vegetation (including timber) assessment and a roads and water control structure inventory, and FWP would solicit public input regarding future recreational-use management. Timber management activities would be conducted to maintain and restore forest health and improve upland wildlife habitat with an emphasis on recruiting mature multi-storied stands, where appropriate. Firewood cutting would continue to be limited to downed trees outside of riparian corridors and would be managed by FWP-issued permits.

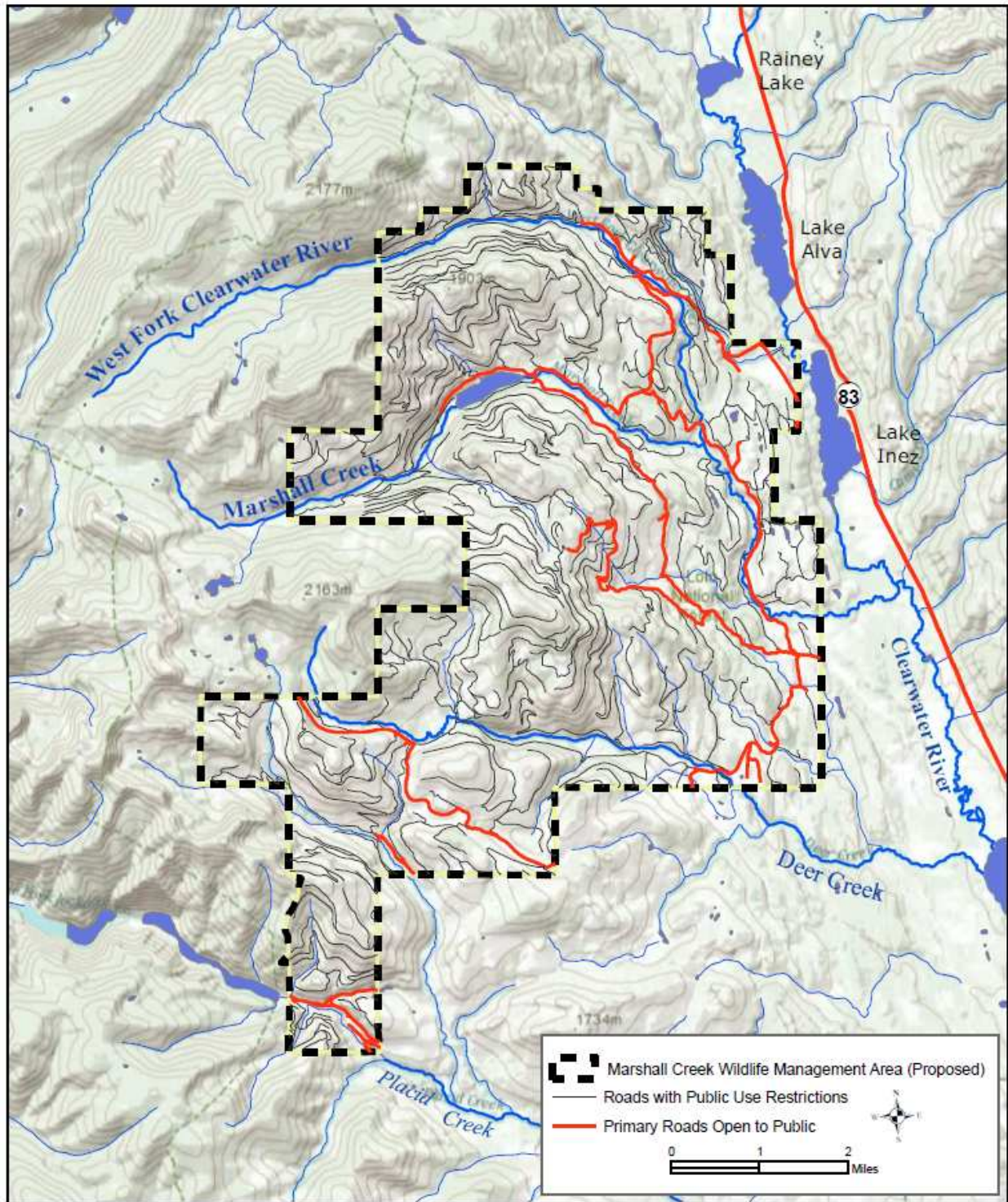


Figure 2. Map of the existing roads within the Marshall Creek WMA Property

Unlike FWP WMAs that are managed for big game winter range, the proposed Marshall Creek WMA would be open to the general public year-round. Wheeled motorized vehicles would be restricted to a designated open-road system (see Figure 2 for road map) and FWP does not expect to significantly modify the current open-road system nor restrict winter snowmobile recreational use of the property.

Any mineral interests owned by TNC/TPL and attached to the parcels would be transferred to FWP. Oil and gas interests are owned by Meridian Minerals Company, and would not transfer to the State of Montana. All hard rock mineral rights would transfer to the State of Montana. A minerals investigation for the proposed Marshall Creek WMA conducted by the Montana Bureau of Mines and Geology in April 2010 indicates that the potential for oil, gas, or mineral development is so remote as to be negligible. Water rights attached to the project property would also be transferred to FWP.

There are no active grazing leases on the property, and FWP does not anticipate introducing livestock grazing.

FWP would install appropriate informational signage at the main access points to the property to communicate property boundaries, accessible roads, FWP regulations, and general site information.

The resort community of Seeley Lake is growing faster than any other area in the Blackfoot Watershed, and development pressure is especially acute in the upper Clearwater Valley where the Marshall Creek property is located. FWP's purchase of this property would prevent any future subdivision or development of the site that could degrade fish and wildlife habitat and limit public access to and through the property.

No Action: Under the No Action Alternative, TNC/TPL would find another buyer for the property because they do not intend to hold the property long-term. TNC/TPL prefers to sell the property as a single unit in order to preserve the aquatic and terrestrial habitats and its associated values. However if a buyer cannot be found, TNC/TPL may consider selling the property in smaller parcels. Current public recreational access to the property would not be guaranteed if the property were to be sold to a private entity and residential development could be initiated by the new landowner.

3.2 VEGETATION

The proposed Marshall Creek WMA is almost entirely forested. Elevations range from 2,400 feet near the lower West Fork of the Clearwater to over 6,600 feet at the summit of Mt. Henry. Forests consist primarily of spruce-fir types; Douglas-fir (*Pseudotsuga menziesii*), and lodgepole pine (*Pinus contorta*) types predominate on the drier aspects. There are also small areas of aspen (*Populus tremuloides*) and black cottonwood (*Populus trichocarpa*).

Past harvest treatments of uplands varied, but included even-age harvest, shelter-wood cuts, seed-tree retention harvest, and selective harvest (both helicopter and skid/cable). Replanting and selection by PCTC favored western larch (*Larix occidentalis*); this species now dominates many stands. The property is generally very productive and regeneration is relatively rapid.

Subalpine forest types develop a complex understory that often consist of conifer saplings (various species), huckleberry (*Vaccinium* spp.), alder (*Alnus rubra*), false huckleberry (*Menziesia ferrunginea*), snowbrush (*Ceanothus velutinus*), willow (*Salix* spp.), serviceberry (*Amelanchier alnifolia*), mountain-lover (*Paxistima myrsinites*), beargrass (*Xerophyllum tenax*), and true grasses.

This property contains approximately 19 miles (75 acres) of high quality riparian habitat along Deer and Marshall Creeks and the West Fork Clearwater River bordered by dogwood (*Cornus sericea*), alder, and willows. Conifers, with a streamside understory of broadleaf shrubs, and scattered cottonwood and aspen, dominate most of the riparian habitat in the project area. Riparian buffers were generally maintained by PCTC along perennial streams by limiting harvest of timber in those areas.

The following chart summarizes the cover types and their approximate acreage amounts based upon land-cover mapping completed by FWP staff.

Level 1 Cover Type	Acres	% Cover
Forest and Woodland	16,271	66.9
Transitional Vegetation	4,331	17.8
Shrubland and Grassland	3,476	14.3
High Montane	164	0.7
Open Water	81	0.3
	24,323	100.0
Level 2 Cover Type	Acres	% Cover
Western North America Cool Temperate Forest	12,323	50.7
Harvested Forest	4,331	17.8
Western North America Flooded and Swamp Forest	3,948	16.2
Vancouverian and Rocky Mountain Grassland and Shrubland	3,431	14.1
Western North America Alpine Scrub, Forb Meadow and Grassland	164	0.7
Open Water	81	0.3
Shrubland and Grassland	22	0.1
Western North America Freshwater Marsh	22	0.1
North American Bog and Fen	1	0.0
	24,323	100.0

In 2007, the Jocko Lakes wildfire burned 2,230 acres of the southern portion of the property. The point of ignition (lightning) was just beyond the southwestern boundary of the Marshall Creek property and fire intensity in the immediate area removed most vegetation (see Figure 1 for location of fire within the Marshall Creek property). Over the last 3 years, grasses, conifer seedlings and deciduous shrubs began to reestablish the area.

Noxious weed infestations on the property are limited. Spotted knapweed (*Centaurea maculosa*) and Canada thistle (*Cirsium arvense*) are the most prevalent weed species and they are largely

limited to roadsides and disturbed sites; spotted knapweed is more widespread in the areas affected by the 2007 Jocko Lakes fire.

Proposed Action: FWP acquisition of the proposed Marshall Creek WMA would prevent further impacts from industrial timber harvest within the riparian corridors, eliminate concomitant effects of sedimentation, runoff, and rises in water temperature from removal of riparian vegetation, and provide opportunity for future riparian corridor restoration activities. Regionally, riparian corridors are most threatened by residential development and industrial timber harvest activities. In addition, mature and complex boreal forest stands important for lynx and other wildlife would be recruited and conserved.

Fire suppression on the Marshall Creek WMA would fall under the DNRC jurisdiction. Wildfires would be immediately suppressed upon detection. In an attempt to prevent human-caused ignitions, FWP may institute temporary measures to progressively restrict open campfires and public access to the property if and as summer-fall fire danger intensifies in some years.

FWP would complete a weed inspection per 7-22-2154(1) MCA, which requires nonfederal government agencies to obtain a weed inspection by the county weed district and requires the development of a weed management plan to ensure compliance with district noxious weed management programs. Through the implementation of FWP's 2008 Integrated Noxious Weed Management Plan (available at <http://fwp.mt.gov/content/getItem.aspx?id=32626>), FWP would comply with district programs and develop the property's weed management plan by the fall of 2010.

FWP anticipates a decrease in noxious weeds and an improvement in overall habitat health following the Plan's implementation. FWP would actively treat weeds through the use of herbicides and biological control agents. As an additional preventive measure, FWP would confine wheeled motorized traffic to the previously described road system and would otherwise avoid unnecessary disturbance of the soil surface.

No Action: If FWP does not purchase the property, critical aquatic and terrestrial habitat may not be conserved, the property may be sold privately and subdivided, public access to and through the property may be lost, and the existing conifer forest and riparian areas could be disrupted by development activities. It is difficult to predict how new ownership would affect existing vegetation and wildlife habitat resources since potential future landowner activities are unknown.

3.3 WILDLIFE SPECIES

The proposed Marshall Creek WMA provides critical habitat for Canada lynx and grizzly bears, as well as habitat for more than 37 Montana Species of Concern (Table 1) and over 120 other native species including elk, white-tailed and mule deer, moose, and a variety of nongame birds and mammals. The property lies within a matrix of protected State and federal lands and is a recognized linkage corridor between the Bob Marshall/Scapegoat and Mission Mountains wildland complexes (Figure 3).

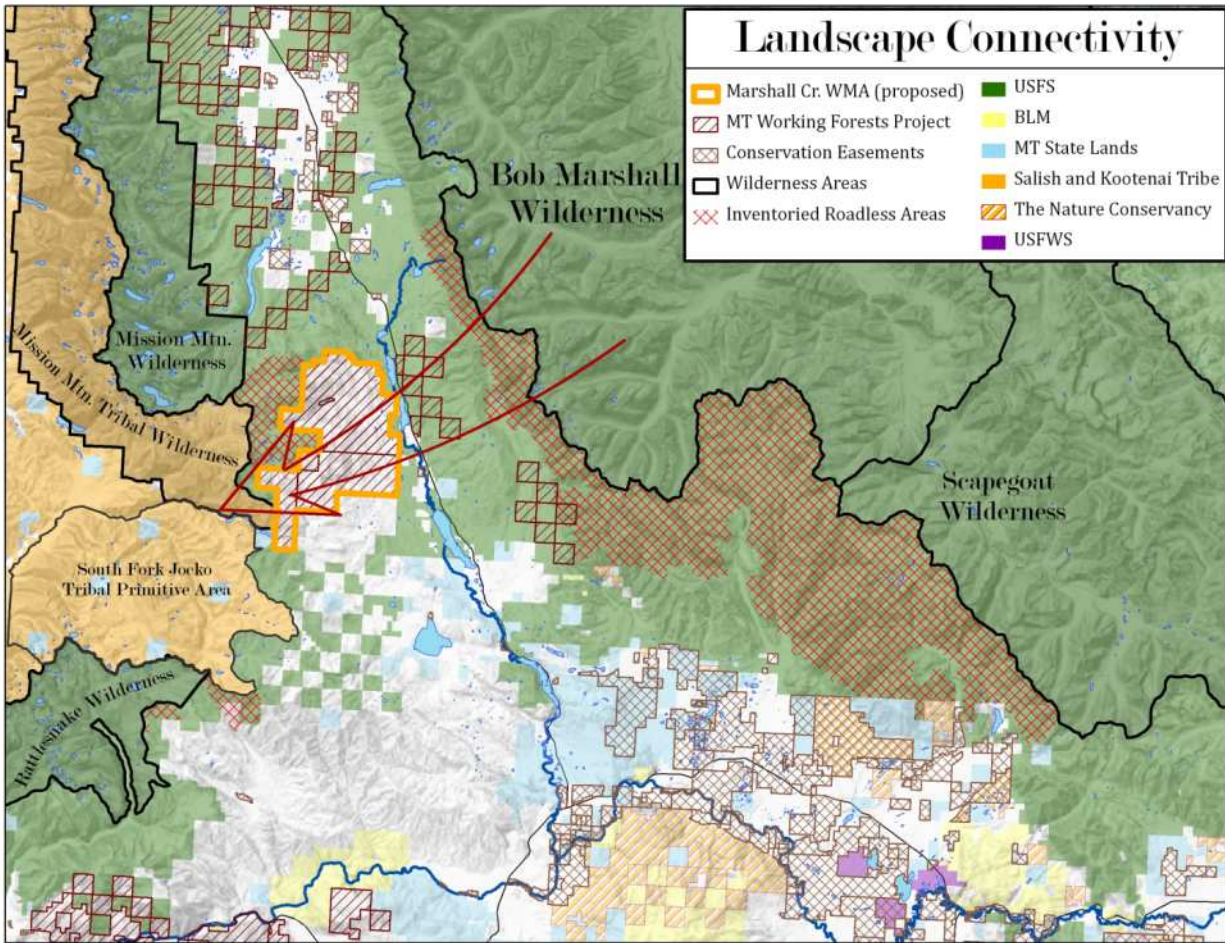


Figure 3. Landscape Connectivity Map

Canada Lynx

Prior to its listing as a federally Threatened species in 2000, very little was known about the US distribution and ecology of the Canada lynx. Over the last decade, the US Forest Service Rocky Mountain Research Station has coordinated a Canada lynx research program intended to define the species' distribution, collect ecological data, and develop predictive habitat models for the species. Researchers conducted extensive systematic track surveys and deployed thousands of hair snaring stations to delineate the distribution of the species in the western US. They found that lynx in the Rocky Mountains now occur in only a few remaining areas. One of the species' strongholds, the most southern, and likely most significant in the lower 48 states exists in the upper Clearwater watershed. The proposed Marshall Creek WMA forms the core of this population's range.

Between 1997 and 2007, over 60 Canada lynx were fitted with tracking collars in the Clearwater. The resulting data highlighted the quality and importance of Canada lynx habitat within the proposed Marshall Creek WMA. The West Fork Clearwater River alone forms the boundary of three individual adult male home ranges and is heavily used by all of them throughout the year.

Resident females with home ranges in the West Fork Clearwater River and Marshall Creek drainages were more fecund and longer-lived than females occupying more southern portions of their range. Offspring of these females regularly dispersed and contributed to the long-term persistence of lynx elsewhere in the watershed where habitat quality was lower. In addition, male dispersers provided important genetic connectivity with metapopulations throughout the Northern Continental Divide Ecosystem (NCDE).

The proposed Marshall Creek WMA contains the most important, currently unprotected, lynx habitat in the western US and is designated USFWS Lynx Critical Habitat. Conservation of these lands is crucial to the eventual recovery and delisting of the species. Long-term persistence and recovery of Canada lynx in the contiguous US will depend, in part, on the recolonization of historically occupied habitat in southern Montana and northern Wyoming. Due to its relative productivity and location at the southern terminus of the NCDE, the Clearwater lynx metapopulation may function as a source of animals dispersing from the NCDE to the Bitterroot and Greater Yellowstone Ecosystems to the south and west.

Grizzly Bear

Much of the proposed Marshall Creek WMA is within the Northern Continental Divide Ecosystem Grizzly Bear Recovery Area. Project land includes and is directly adjacent to modeled grizzly bear denning habitat, and grizzlies heavily use the area for foraging post-emergence through fall. FWP data indicate particularly high use of the project area's riparian corridors and abundant huckleberry, serviceberry, chokecherry, and hawthorn present in forest openings and regenerating harvest units. The project area lies within a recognized and highly important grizzly bear linkage zone.

Game Species

Approximately 300 elk use the subject property all or part of the year, and it supports important populations of mule deer, white-tailed deer, moose, black bear, mountain lion, gray wolf, and mountain grouse. The property lies within deer/elk Hunting District 285, which supports tens of thousands of hunter-days annually.

Additional Species

The proposed Marshall Creek WMA is important wolverine habitat and falls within a critical wolverine linkage zone. Schwartz et al. (2009) found that delineating likely wolverine dispersal paths as areas with persistent spring snow cover significantly improved correlations to patterns of genetic relatedness among current populations. The authors were able to spatially describe these dispersal corridors based on mapped persistent spring snowpack and observed patterns of genetic relatedness. This work indicates that successful wolverine dispersal has been largely limited to a few discrete corridors within Montana. The proposed Marshall Creek WMA falls squarely within two of these identified corridors: the principal north/south Montana corridor through the Mission Mountains and NCDE, and a critical east/west corridor connecting the Mission Mountains with the Bob Marshall Wilderness Complex to the east (see Figure 3). Much of the proposed Marshall Creek WMA is *Predicted Wolverine Habitat* as defined by Brock et al. (2007) and has the persistent spring snowpack necessary for wolverine occupancy as identified by Copeland (*unpublished manuscript*) and Schwartz et al. (2009). Track surveys routinely detect wolverine presence on or adjacent to the subject lands.

The project area lies along a major raptor migration route. Forest and riparian areas on the project area provide important foraging and roosting habitat for migrating forest hawks, including northern goshawks, Cooper's hawks (*Accipiter cooperii*), and sharp-shinned hawks (*Accipiter striatus*). There are several active bald eagle nests adjacent to the property, some within a few hundred yards of the property's boundary. Additional avian species expected to be present include: brown creeper (*Certhia Americana*), boreal chickadee (*Poecile gambeli*), chestnut-backed chickadee (*Poecile rufescens*), evening grosbeak (*Coccothraustes vespertinus*), fox sparrow (*Passerella iliaca*), golden-crowned kinglet (*Regulus satrapa*), gray jay (*Perisoreus Canadensis*), hermit thrush (*Catharus guttatus*), pine grosbeak (*Pinicola enucleator*), ruby-crowned kinglet (*Regulus calendula*), varied thrush (*Ixoreus naevius*), Townsend's warbler (*Dendroica townsendi*), and winter wren (*Troglodytes troglodytes*).

Black bear (*Ursus americanus*), mountain lion (*Puma concolor*), marten (*Martes americana*), bobcat (*Lynx rufus*), and a host of other wildlife species are common. In Montana, boreal forest-associated species include vagrant shrew (*Sorex vagrans*), montane shrew (*Sorex monticolus*), southern red-backed vole (*Myodes gapperi*), red-tailed chipmunk (*Tamias ruficaudus*), deer mouse (*Peromyscus maniculatus*), northern flying squirrel (*Glaucomys sabrinus*), northern water shrew (*Sorex palustris*), red squirrel (*Tamiasciurus hudsonicus*), long-tailed vole (*Microtus longicaudus*), montane vole (*Microtus montanus*), and northern bog lemming (*Synaptomys borealis*).

Amphibian species include: boreal toad (*Bufo boreas*), long-toed salamander (*Ambystoma macrodactylum*), Columbia spotted frog (*Rana luteiventris*), and Rocky Mountain tailed frog (*Ascaphus montanus*) (K. DuBois, FWP, personal communication 2008).

Proposed Action: This project would ensure the protection of important habitat that could contribute to the continued occupancy and recovery of several imperiled terrestrial wildlife species including wide-ranging native carnivores such as grizzly bear, Canada lynx, wolverine, and fisher. FWP acquisition of the proposed Marshall Creek WMA would ensure connectivity among and the biological effectiveness of the nearby Bob Marshall, Scapegoat, and Mission Mountain wildland complexes. The property is also within a linkage zone identified as one of the crucial connections within the Yellowstone-to-Yukon corridor essential to maintaining the genetic viability of grizzly bears within and between the US and Canada.

FWP acquisition of the property would protect and enhance riparian corridors important to migratory songbirds, small mammals, amphibians, and fish (fish species are described in Section 3.4). Furthermore, FWP would maintain current hunting, trapping, snowmobiling, and wildlife viewing opportunities.

Conservation of the proposed Marshall Creek WMA property would also complement ongoing efforts to formally designate the Forest Service-managed upper West Fork of the Clearwater into the Mission Mountain Wilderness.

No Action: If no action were taken by FWP, critical habitat for a host of game and nongame wildlife species could be degraded or lost, an important corridor between the Bob Marshall/Scapegoat and Mission Mountains wildland complexes could be compromised, and the

subject lands would be put at greater long-term risk of subdivision and development. Furthermore, historic public access to the property and through it to large tracts of adjacent public lands could be lost. This would restrict hunter access and therefore affect FWP's ability to manage game species on and adjacent to the property.

If TNC/TPL retained the property and sold it to another buyer, risks of loss of habitat and public access are unknown; future resource management and the provision of public access would be dependent on the desires of the new property owner(s).

3.4 FISHERIES AND AQUATIC RESOURCES

The Clearwater Lake, River, and tributary system provides habitat for the complete life cycle of many native aquatic species, including self-sustaining populations of two imperiled native fish: westslope cutthroat trout, a Montana Species of Concern and petitioned for listing under the federal Endangered Species Act (ESA); bull trout, a federally Threatened species under the ESA; and western pearlshell mussel, a Montana Species of Concern. Other native fish species present include mountain whitefish (*Prosopium williamsoni*), redbelt shiner (*Richardsonius balteatus*), peamouth (*Mylocheilus caurinus*), longnose dace (*Rhinichthys cataractae*), sculpin (*Cottus* spp.), longnose sucker (*Catostomus catostomus*), largescale sucker (*Catostomus catostomus*), and northern pikeminnow (*Ptychocheilus oregonensis*).

The Clearwater system supports adfluvial life history forms of both these native species (bull and westslope cutthroat trout). Adfluvial bull trout exhibit wide-ranging migratory behavior that includes six lakes, however spawning and rearing only occurs at discrete sites in colder tributaries. In the project area, the West Fork Clearwater River and Marshall Creek have adfluvial populations whereas little is currently known about the life history of bull trout in Deer Creek. Adfluvial westslope cutthroat trout (WSCT) also use extensive areas of the watershed including the lakes, river and natal headwater areas high in the tributaries. The WSCT of the upper watershed exhibit a very high level of genetic purity (most populations exceed 99% genetic purity) and most tributaries support stream-resident, as well as adfluvial WSCT. Life histories of other native fish and aquatic species are variable, but these species also play a critical role in the ecosystem.

Westslope Cutthroat Trout

Westslope cutthroat trout (WSCT), a species of concern in Montana has declined over much of its historic range within the last century. Reasons for this decline include habitat loss and degradation, genetic introgression with introduced rainbow trout and Yellowstone cutthroat trout, over-harvest, and competition with introduced brook trout and brown trout. In the Clearwater River system, *WSCT occupy > 90% of their historic range*. The Blackfoot Watershed also supports one of the larger migratory metapopulations of WSCT in Montana, and the Clearwater drainage supports its major adfluvial components. The Clearwater supports a nearly basin-wide distribution of WSCT, although many of the migratory populations are well below carrying capacity.

WSCT stocks include migratory (*fluvial, adfluvial*) and non-migratory (*resident*) fish. Both rely on high quality tributary habitats for spawning, rearing, and over-wintering and often inhabit the same stream. Fluvial WSCT spend their early life stages in small streams, and then migrate to

ivers where they mature and grow much larger than resident fish before returning to natal tributaries to spawn. Adfluvial WSCT migrate to lakes to mature before they return to their natal tributaries to spawn. In the Blackfoot Basin, fluvial WSCT occupy the river system, whereas adfluvial fish occupy primarily the Clearwater Chain of Lakes. Resident WSCT trout generally inhabit small headwater streams across the basin, including some physically isolated from the river.

Bull Trout

Bull trout populations inhabiting six low- and mid-elevation lakes within the Clearwater River system are sustained by only three primary spawning populations in the West Fork, East Fork, and Morrell Creek. The West Fork drainage (including Marshall Creek and Lake Marshall) supports more than 40% of the spawning by migratory adults based on redd surveys (Benson 2009, FWP 2001-2009 unpublished data). Within these tributaries, spawning typically occurs in specific reaches that make up less than 25% of the total stream's length. Smaller populations of bull trout have also been documented in Deer Creek and Boles Creek.

To assist in bull trout recovery, the Montana Bull Trout Recovery Plan established recovery goals for the greater Blackfoot Watershed including the Clearwater River system. These recovery goals are:

- 1) Maintain self-reproducing migratory fish with access to tributary streams and spawning areas in all core area watersheds.
- 2) Maintain the population genetic structure throughout the watershed.
- 3) Maintain and increase the connectivity between the Blackfoot River and its tributaries.
- 4) Establish a baseline of redd counts in all drainages that presently support spawning migratory bull trout.
- 5) Maintain a count of at least 100 redds or 2,000 individuals in the Blackfoot drainage with an increasing trend thereafter.

Recent FWP telemetry studies and population surveys (FWP 1995-2007 unpublished data) have confirmed the importance of the West Fork Clearwater River, East Fork Clearwater River, and Morrell Creek (Clearwater drainage), as well as Monture Creek, Copper Creek, and the North Fork Blackfoot River (remainder of basin) as the key spawning and rearing habitats for migratory bull trout in the greater Blackfoot Watershed.

The proposed Marshall Creek WMA is entirely within the federally designated "Clearwater River and Lakes Bull Trout Core Area," a primary focal area of the Clark Fork River Recovery Unit of the USFWS's Bull Trout Draft Recovery Plan (<http://www.fws.gov/pacific/bulltrout/Recovery.html>). This recovery unit identified a major recovery action as "minimize recreational development in bull trout spawning and rearing habitat." Specifically mentioned is the expansion of new golf courses, ski areas, campgrounds, and second home or other recreational developments in the corridors of bull trout spawning and rearing streams, all of which are potential threats to bull trout within the Clearwater. In addition, the Recovery Plan states that as a recovery action for the Upper Clark Fork recovery unit to "use all available conservation programs and regulations to protect and conserve bull trout and bull trout habitats through

provisions of such things as purchase of conservation easements.” Provision of fish passage at main stem river dams and obstructions are also mentioned.

Mountain Whitefish

Mountain whitefish have not been a target species for monitoring or evaluations, due to a general inability to handle the species without causing high mortality. Both adult and juvenile mountain whitefish are found throughout the lower reaches of large tributaries, in the main stem Clearwater lakes and river system. Like other species in the salmonid family, mountain whitefish require clear, cold streams where schools feed in riffles. In the main stem Clearwater system, whitefish move out of the river reaches that are naturally warmed by surface outflow from lakes, and move into larger tributaries or the cooler depths of lakes. The species is one of our most important native fish from an ecological perspective, due to its high forage value for aquatic and terrestrial predators.

Western Pearlshell

The western pearlshell is a native freshwater mussel species that inhabits coldwater streams on both sides of the continental divide. This species is typically found in trout streams and rivers, particularly in drainages where the westslope cutthroat trout (its native fish host) also occurs. The distribution and abundance of this species has declined dramatically in Montana over the past century. However, the middle portion of the Clearwater system supports one of the best remaining metapopulations in the state (Dave Stagliano, Montana Natural Heritage Program). Within the project area, western pearlshell are common in Marshall Creek below Lake Marshall and are abundant in the Clearwater River downstream of the West Fork confluence.

West Fork Clearwater River

The West Fork Clearwater River is a large, fourth-order tributary system with cold water temperatures, high water quality, and perennial flow from headwaters to mouth. The greater West Fork watershed is vital for native fish, particularly bull trout and WSCT, because:

- 1) It supports excellent spawning and rearing habitats for native fish with unique (adfluvial) life histories;
- 2) It is located in a key position relative to the Clearwater lakes and river system; and
- 3) It remains a large, connected series of intact aquatic habitat segments located below roadless (USFS) headwaters. There are very few migratory bull trout populations remaining in the Blackfoot and Clark Fork Basins. The West Fork population represents one of the two strongest migratory bull trout populations remaining in west-central Montana.

Although the West Fork Clearwater River is inhabited by abundant populations of stream-resident and migratory westslope cutthroat trout, this stream stands out as an adfluvial bull trout nursery area and is considered critical habitat. Recent basin-wide sampling and several bull trout telemetry studies in the Clearwater and Blackfoot Basins have highlighted the importance of just a few key tributaries that provide the majority of recruitment for these large systems (Benson 2009, FWP 2001-2009 unpublished data). The West Fork is one of these tributaries as it supports one of the largest spawning populations (>65 adfluvial redds annually in 2007-2009) and serves as the primary rearing area for migratory fish in Lake Alva, Lake Inez, and Seeley

Lake. Essentially, the West Fork is the key tributary habitat for the middle Clearwater bull trout metapopulation. The property proposed for protection includes most of the bull trout spawning reaches and nearly the entire main stem migratory corridor. The West Fork provides similar value for migratory and stream-resident westslope cutthroat trout. Bull trout and westslope cutthroat trout are the predominant or only fish species present in all stream sections upstream of the confluence with Marshall Creek. Genetic testing in several reaches indicates high genetic purity for this WSCT population (99%-100% WSCT genetic contribution). West Fork main stem sections downstream of Marshall Creek are the primary migration corridor for migratory fish in the system.

Marshall Creek

Marshall Creek is a smaller, more variable system with coldwater inlet stream, a large mid-elevation lake and outlet drainage that enters the lower West Fork. Lake Marshall and Marshall Creek support a smaller, separate (possibly disjunct) population of adfluvial bull trout, although there is recent evidence of connectivity and genetic exchange with the lower West Fork and Clearwater River (FWP 2007-2008 unpublished data). Upper Marshall Creek (above Lake Marshall) is an important spawning and rearing area for adfluvial bull trout. The lake and upper stream systems are also considered critical habitat for bull trout. Marshall Creek supports a hybridized population of WSCT and the reach from the lake outlet to the West Fork confluence is warmed by lake surface waters in July-August. As a result, use by salmonids and other coldwater species are seasonal. However, recent radio-telemetry research (FWP 2007-2008 unpublished data) has documented significant use of the lake outlet reach by adfluvial bull trout during migrations (March-June) to the upper West Fork and Lake Marshall and this tributary system is considered a key habitat element for the greater West Fork population unit. Lower Marshall Creek also supports a viable western pearlshell mussel population between Lake Marshall and the West Fork confluence.

Marshall Creek feeds the 81-acre Lake Marshall in the northwest portion of the property. During the mid-2000s, FWP stocked the lake with an average of 1,900 westslope cutthroat trout annually.

Deer Creek

Deer Creek is a large, third-order freestone tributary drainage that flows directly into Seeley Lake. This stream supports adfluvial and stream-resident WSCT, the predominant species. Genetic testing in several reaches indicates high genetic purity for this WSCT population (99%-100% WSCT genetic contribution). Although it is not currently a stronghold, bull trout have also been consistently detected at low densities in this watershed. Deer Creek supports relatively intact riparian stream corridors, but has been impacted by large-scale timber management in headwaters and uplands. This stream has high potential for bull trout recovery and enhanced WSCT populations once watershed disturbance is mitigated.

Previous and Current Fisheries Restoration Efforts

Major efforts are underway to enhance native fish populations in the Clearwater drainage. For example, FWP and partners are working to remove main stem fish passage obstructions, remove or improve existing road systems, and enhance protection of native trout populations through appropriate angling regulations. Fish passage improvements on the three primary obstructions

on the Clearwater River are scheduled for 2010, including the removal or modification of the Lake Inez Fish Barrier (Emily-A dam). Fishing regulation changes were enacted to increase protection of key bull trout spawning and rearing tributaries, which complement current regulations encouraging northern pike removal (since 1990s). The Seeley Lake community has also recently developed a citizen-driven lake and stream water quality monitoring program. Two irrigation ditches have been screened to eliminate the loss of fish from Morrell Creek, a nearby and important bull trout stream in the Clearwater Drainage. The screening was done cooperatively with irrigators, USFWS, Trout Unlimited, Blackfoot Challenge, and FWP.

Proposed Action: FWP acquisition of the proposed Marshall Creek WMA would protect more than 25 miles of native fish-bearing water in four major tributary drainages (West Fork Clearwater River, Marshall Creek, Deer Creek, and the North Fork of Placid Creek) within the upper Clearwater lakes and river system.

The acquisition would facilitate the expansion of an active public/private stream restoration program to those lands. FWP anticipates conducting numerous riparian restoration projects including the removal of water control structures and redundant roads that contribute sediment to streams. Active restoration of impacted Clearwater streams would protect and improve critical bull and westslope cutthroat trout spawning and rearing areas, and prime habitat for mountain whitefish and western pearlshell mussel.

Acquisition would also further leverage ongoing partners' work adjacent to project lands. Protection of project lands would complement ongoing efforts to formally incorporate the upper West Fork of the Clearwater (managed by the Forest Service) into the Mission Mountain Wilderness that would help ensure bull trout and WSCT persistence and recovery within the Clark Fork River Basin.

No Action: If FWP decides not to purchase the property, it is unknown how fisheries and water resources (riparian areas, wetlands) would be affected by another buyer's future management after TNC/TPL sells the property.

Habitat fragmentation, alterations, and degradation associated with development and non-sustainable natural resource extraction are major threats to native salmonids. Widely divergent, uncoordinated, and inconsistent management of the fisheries and water resources if the property were to be subdivided or developed would likely result in impacts to the watershed's outstanding natural resource values and imperiled species, including native bull and westslope cutthroat trout, and mountain whitefish. Poor timber harvest practices, dispersed residential septic systems, invasive species, new road construction, and culverts and stream crossings would likely diminish riparian and coniferous vegetation and increase surface disturbance, resulting in elevated water temperatures, sedimentation, and runoff. It is possible numerous ongoing (and future) native trout restoration activities in the Clearwater drainage would be hampered by the potential conversion of the Marshall Creek WMA property into multiple and smaller, privately owned properties.

3.5 Aesthetics and Recreation Opportunities

The Marshall Creek WMA property is visible from the community of Seeley Lake and along the Highway 83 corridor near Lake Alva and Lake Inez. The area is especially striking in fall when the abundant larch turn golden; the local Tamarack Festival at the town of Seeley Lake celebrates this event and draws many tourists to the Valley each year.

Plum Creek Timber has historically allowed public access to the tracts covered by this proposal. Public recreational opportunities on the proposed Marshall Creek WMA include but are not limited to fishing, hunting, bird watching, hiking, horseback riding, dog-sledding, snowmobiling, and cross-country skiing.

Hunting is an especially important public use of the subject lands, and is the primary means for balancing elk and deer herds with forage resources and landowner tolerance of those species. Elk hunting is of particular importance to the local economy through sales of lodging, equipment, and guide services. The proposed Marshall Creek WMA is included within Hunting District 285 (elk/deer), which supports over 15,000 elk hunter-days and over 20,000 deer hunter-days annually.

Fisheries provide significant economic benefits to the Seeley Lake economy. Combined non-resident and resident angler pressure estimates for the five major lakes comprising the Clearwater Chain-of-Lakes rose from 11,885 angler days in 1989 to 21,535 angler days in 2005.

The proposed Marshall Creek WMA currently has approximately 43 miles of groomed and ungroomed snowmobile trails. The trails are maintained by the Seeley Lake Driftriders Snowmobile Club (www.driftriders.org); FWP supports this trail grooming program through the issuance of annual maintenance grants. An estimated usage level, as collected by the Forest Service in 2007, was 16,335 user trips per year from the Westside Bypass trailhead (one of several trailheads used to access the property) alone, with an average snowmobile daily travel of 174 trips.

Proposed Action: Under the proposed action, current public access and recreational opportunities would be maintained and enhanced. Protecting fish habitat in Marshall, Deer, the West Fork Clearwater, and North Fork of Placid Creeks benefits the Clearwater River fisheries by providing nursery areas for fish that eventually migrate to the lakes. Conversely, loss of fishery values and degradation of the relatively pristine nature of the riparian corridors would negatively impact the local economy.

Under this proposal, the Marshall Creek WMA would remain open to public hunting and would continue to be managed under the standard deer/elk regulations for Hunting District 285. No Marshall Creek WMA-specific permits or licenses are anticipated.

Unlike some FWP WMAs, the Marshall Creek WMA would not be routinely closed to the public at any time of the year. Roads currently designated open to wheeled-motorized use are expected to remain open, and snowmobiles would be restricted to existing established open roads only between April 1st and November 30th--during the winter, there would be no restrictions.

Camping would be permitted year-round but limited to a 14-day maximum stay and fire restrictions may be implemented as wildfire risk dictates. Parking for camping or other recreation activities would be restricted to the road shoulders or established pullouts.

Recreation would be managed in accordance with applicable FWP rules and regulations, including FWP's Commercial Use Rules. Commercial outfitting would not be permitted on any portion of the WMA. FWP would install appropriate boundary and regulation signage and additional site information would be available via brochures and the FWP website to inform the public of the allowable activities within the WMA.

See the Draft Management Plan (Attachment A) for a more detailed description of proposed recreation management of the WMA.

No Action: If these lands were sold on the open market to another buyer, free public access to and through the property for existing recreation activities could be restricted or altered. Future public recreation opportunities under different ownership are difficult to analyze since future recreation management under other ownership would be at that owner(s) sole discretion.

3.6 Cultural and Historical Resources

The southwestern boundary of the proposed Marshall Creek WMA directly abuts the Confederated Salish and Kootenai Tribes' South Fork Jocko Tribal Primitive Area, which is an important cultural area for the Tribes.

The historic Kalispell Trail to the Buffalo crosses the southwestern corner of the Marshall Creek WMA property. This trail was used by the Nez Perce Indians as they traveled through the area in the fall.

The Montana State Historic Preservation Office (SHPO) completed a cultural resource file search for the property and reported that there are a few previously conducted cultural inventories completed within the project area. The results of those inventories noted only one historic site where lithic scatter was discovered.

Proposed Action: FWP's proposed action would ensure that lands adjacent to the South Fork Jocko Primitive Area remain open and in an undeveloped state. The proposal would not directly affect any known cultural or historical resources. However, by Montana law (22-3-433 MCA), all state agencies are required to consult with the State Historic Preservation Office on the identification and location of heritage properties on lands owned by the state that may be adversely impacted by a proposed action, i.e. timber harvest.

No Action: It is uncertain if recorded and/or unrecorded historic sites would be affected if the proposed Marshall Creek WMA is not purchased by FWP. Sale and potential development of the property could degrade the natural character of lands adjacent to the South Fork Jocko Primitive Area and wilderness areas.

3.7 Community and Taxes

Approximately 2,200 people live year-round in the upper Clearwater watershed, including the community of Seeley Lake, and that number swells to 4,000 in the summer months. Between 1990 and 2000, the year-round population of the region grew approximately 3% annually compared to approximately 2% for the county and 3% for the City of Missoula. The population of the Seeley Lake area is growing at a moderate rate similar to the rest of Missoula County and just slightly faster than the City of Missoula. New homes have been constructed in the region at a rate exceeding that of population growth, indicating the area's desirability for both primary and second homes. More than half of the houses in the Plan Area were built in the last 20 years.

The economy of Seeley Lake has been traditionally based on the extraction and processing of timber resources, recreation, and tourism. Logging and lumber mill work account for approximately 25% of the employment in the region; employment in tourism and recreation-related sectors such as accommodation and food service, retail trade, and real estate are also significant employers. The timber economy itself has become more broad-based, with timber harvest within the region generally declining.

Proposed Action: The proposed Marshall Creek WMA fee title purchase by FWP would provide long term protection of wildlife habitat in these watersheds, maintain the open space and integrity of the land, enhance public recreation opportunities, and direct management of the property toward habitat improvement and recreational use. Existing local businesses that support snowmobiling and other recreation activities are unlikely to be affected by FWP ownership of the property because those activities would remain available to the public.

This purchase is not expected to reduce the tax revenues that Missoula County collects on this property under 87-1-603, MCA. FWP is required by 87-1-603, MCA, to pay "to the county a sum equal to the amount of taxes which would be payable on county assessment of the property were it taxable to a private citizen." Current taxes on this land are approximately \$18,720 per year based on the most recent assessment.

See Attachment B for FWP's Socio-Economic Assessment for additional details.

In conjunction with any acquisition of land, except that portion of acquisitions made with funds provided under 87-1-242(1), MCA, FWP is required to include 20% of the amount of purchase price or \$300,000, whichever is less, to be used for maintenance of FWP-owned properties, consistent with the Good Neighbor policy (87-1-209, MCA).

No Action: If the property were sold and developed, tax revenues paid to the County could be higher than current levels. Predicting the final use of the property and exact tax consequences if owned by another party(s) is difficult to assess.

4.0 RESOURCE ISSUES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

The Montana Environmental Policy Act (MEPA) provides for the identification and elimination from detailed study of issues, which are not significant or which have been covered by a prior environmental review, narrowing the discussion of these issues to a brief presentation of why they would not have a significant effect on the physical or human environment or providing a reference to their coverage elsewhere (Administrative Rules of Montana 12.2.434(d)). While these resources are important, they were either unaffected or mildly affected by the proposed action, or the effects could be adequately mitigated.

A few issues were found not to be significant to the decision and were eliminated from further detailed analysis.

4.1 Soils

A query of the US Department of Agriculture's (USDA) Soil Survey database of the Marshall Creek WMA property identified over 20 different soil types within its boundaries, ranging from various silt and gravelly loams to outcrop complexes. The predominant type was Waldbillig-Holloway gravelly silty loam at over 6,900 acres. Also present in amounts higher than 1,000 acres are Felan and Bata-Waldbillig. The remaining soil types are present in lesser amounts. Slopes range from zero to eighty percent. (USDA Soil Survey database, accessed 6/22/2010)

No new soil disturbing activities are planned for the site. The existing open road system would be maintained to ensure public safety.

4.2 Air Quality

Under either alternative, there are unlikely to be changes to the ambient air quality since neither FWP (nor TNC/TPL) plan any construction or development activities that could affect particulate levels and air quality.

4.3 Noise and Electrical Effects

Since PCTC has been managing the property as open for public recreation activities, and FWP would have a similar management approach, the potential for changes in noise levels is expected to be minimal. The potential for changes in noise levels would depend on FWP approaches to managing type, timing, and location of recreation activities.

Existing electrical structures and easements would not be affected by either alternative.

4.4 Risk and Health Hazards

As part of FWP's due diligence, the Department would complete a hazardous materials survey prior to the property's acquisition. Flyover surveys have been completed, as well as ground-truthing of the flyover data and investigation of historical materials of the area.

4.5 Cumulative Impacts

Proposed Action: The proposed purchase would permanently protect and conserve significant forested habitat in the Clearwater Valley and would ensure the continued function of important wildlife movement corridors for wide-ranging wildlife such as lynx, grizzly bear, and wolverine between the Mission Mountains and Bob Marshall/Scapegoat wildernesses. Such connectivity is essential for the recovery of threatened, endangered, and sensitive species and maintaining viability of numerous other species such as elk, black bear, and a myriad of nongame species.

Similarly, the long-term protection of Marshall Creek, Deer Creek, the West Fork of the Clearwater, and North Fork of Placid Creek and their tributaries would contribute to the perpetuation of native trout populations in the Clearwater River and the larger Blackfoot River watershed. Any future fisheries restoration activities initiated by FWP to improve water quality and riparian areas for native trout population would be expected to have positive benefits for all aquatic species, as well as terrestrial species.

FWP would manage the Marshall Creek WMA in perpetuity for the benefit of terrestrial and aquatic species and manage its forested landscape such that riparian corridors are enhanced, multistoried mesic and boreal forests are recruited, forests are diversified for increased habitat values, and noxious weeds are controlled.

Maintaining year-round public access to the subject lands would continue to provide recreational opportunities (hunting, snowmobiling, fishing, etc.) for the general public and would sustain the local businesses in the Seeley Lake area that support them. Furthermore, preserving public access to and through the Marshall Creek WMA property would allow the public the opportunity to enjoy and recreate on adjacent State and federal lands.

Although the purchase of the Marshall Creek WMA property by FWP would reduce the potential for some residential development near the community of Seeley Lake, this reduction is minimal since other real estate is still available in the area for such development activities. Beyond the economic benefits the community would receive from the protection of the Marshall Creek property, the community's northwestern viewshed would be preserved.

No Action: If no action were taken, critical habitat important for maintaining native wildlife and fish populations in the Clearwater drainage would be vulnerable to subdivision and commercial and/or residential development. Habitat fragmentation, alterations, and degradation associated with development and non-sustainable natural resource extraction are major threats to native wildlife and salmonids. Crucial habitat and wildlife movement corridors for threatened, endangered, and sensitive fish and wildlife species could be at risk or compromised under this alternative.

Widely divergent, uncoordinated, and inconsistent management of water resources--if the property were to be subdivided or developed--would likely result in impacts to the watershed's outstanding natural resource values. Potential poor timber-harvest practices, dispersed residential septic systems, invasive species, new road construction, and culverts and stream crossings would likely diminish riparian and coniferous vegetation and increase surface disturbance, resulting in elevated water temperatures, sedimentation, and runoff, which could

have long-term negative impacts on fishery populations and recruitment rates of imperiled species.

The loss of public access to the Marshall Creek WMA property would be a significant loss of public recreational opportunity and reduce the potential for active wildlife population management by FWP (i.e., hunting) if new owners choose to prohibit historic recreational activities (i.e., snowmobiling, hunting, camping, etc.). Traditional uses of adjacent public lands could be impacted as well, if new landowners closed their properties to the public.

5.0 NEED FOR AN ENVIRONMENTAL IMPACT STATEMENT

Based on the significance criteria evaluated in this EA, is an EIS required? No. Based upon the above assessment, which has identified a very limited number of minor impacts from the proposed acquisition and subsequent management of the property by FWP, an Environmental Impact Statement (EIS) is not required and an environmental assessment is the appropriate level of review.

6.0 PUBLIC PARTICIPATION

6.1 Public Involvement

The public will be notified in the following manners to comment on this current EA, the proposed action and alternatives:

- One statewide press release;
- Two public notices in each of these newspapers: *Blackfoot Valley Dispatch* (Lincoln), *Great Falls Tribune*, *Independent Record* (Helena), *Missoulian*, and *Seeley Swan Pathfinder*;
- Direct mailing to adjacent landowners and interested parties;
- Public notice on the Fish, Wildlife & Parks web page <http://fwp.mt.gov> (*Recent Public Notices*)

Copies of this EA will be available for public review at FWP Region 2 Headquarters in Missoula, at FWP headquarters in Helena, and on the FWP web site (<http://fwp.mt.gov> under *Recent Public Notices*)

A public meeting is scheduled for August 12th at 7 p.m. in the Seeley Lake Community Hall (immediately north of Seeley Lake on Highway 83) to provide the public a venue to submit comments and have questions answered by FWP staff. This level of public notice and participation is appropriate for a project of this scope having few and limited physical and human impacts.

6.2 Offices/Programs contacted or contributing to this document:

Montana Fish, Wildlife & Parks:
Wildlife and Fisheries Division
Lands Bureau
Legal Unit
Strategic Planning & Data Services
Montana Natural Heritage Program
Montana State Historic Preservation Office
The Nature Conservancy
USDA Natural Resources Conservation Service

6.3 Duration of Comment Period

The public comment period will extend for (30) thirty days beginning August 2, 2010. Written comments will be accepted until 5:00 p.m., August 31, 2010 and can be mailed to the address below:

MT FWP Region 2
Attn: Marshall Crk WMA EA
3201 Spurgin Rd.
Missoula, MT 59804

or email comments to MarshallWMA@mt.gov

or phone comments to 406-542-5500

6.4 Anticipated Timeline of Events

Submission of Project to the FWP Commission	October 2010
Submission of Project to the Land Board	October 2010
Closing of Phase I if Approved	November 2010

7.0 EA PREPARATION

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Jay Kolbe, FWP Wildlife Biologist, Seeley Lake, MT
Ladd Knotek, FWP Fisheries Biologist, Missoula, MT
Pat Saffel, FWP Regional Fisheries Manager, Missoula, MT
Mike Thompson, FWP Regional Wildlife Manager, Missoula, MT

REFERENCES

American Wildlands. 2009. Priority Linkage Assessment Reports: Crown of the Continent.
Bozeman, MT. www.wildlands.org

- Benson, A. 2009. Effects of barriers to migratory bull trout and application of a conceptual framework to evaluate tradeoffs associated with dam removal in the Clearwater Drainage, Montana. Masters Thesis, University of Montana, Missoula, MT.
- Brock, B. L., R. M. Inman, K. H. Inman, A. J. McCue, M. L. Packila, and B. Giddings. 2007. Broad-scale wolverine habitat in the conterminous Rocky Mountain states. *In* Greater Yellowstone Wolverine Program Cumulative Report, 2007. Wildlife Conservation Society. Bozeman, MT.
- Copeland, J. P., J. M. Peek, C. R. Groves, W. E. Melquist, K. S. McKelvey, G. W. McDaniel, C. D. Long, and C. E. Harris. 2007. Seasonal habitat associations of the wolverine in central Idaho. *Journal of Wildlife Management* 71:2201-2212.
- Missoula County Rural Initiatives, 2009. Seeley Lake Regional Plan. Missoula MT.
- Montana Bull Trout Restoration Team. 2000. Restoration plan for bull trout in the Clark Fork River Basin and Kootenai River Basin Montana. A report to Governor Marc Racicot c/o Montana Fish, Wildlife & Parks, Helena MT.
- Montana Fish, Wildlife & Parks (MFWP). 1990 and 2006. Montana statewide angler pressure survey. Montana Fish, Wildlife & Parks, Bozeman MT.
- Montana Fish, Wildlife & Parks (MFWP). 2005. Montana's Comprehensive Fish and Wildlife Conservation Strategy. 1420 East Sixth Avenue, Helena, MT 59620-0701.
- Montana Fish, Wildlife & Parks, 2005. Comprehensive Fish & Wildlife Management Strategy. Helena MT.
- Plum Creek Timber, 2000. Native Fish Habitat Conservation Plan. Seattle WA.
- Schwartz, M. K., J. P. Copeland, N. J. Anderson, J. R. Squires, R. M. Inman, K. S. McKelvey, K. L. Pilgram, L. P. Waits, and S. A. Cushman. 2009. Wolverine gene flow across a narrow climatic niche. *Ecology* 90:3222-3232
- Unpublished data. 1995-2008. Bull trout redd counts, fish population surveys, and bull trout radio-telemetry studies. Montana Fish, Wildlife & Parks, Missoula, MT.

ATTACHMENTS

- A. Draft Management Plan, Marshall Creek WMA (separate document)
- B. Marshall Creek WMA Fee Title Acquisition, Socio-Economic Assessment (separate document)